UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/534,832	03/24/2000	Peter Rae Shintani	SONY-50N3599	2618

7590   02/26/2003

Wagner Murabito & Hao LLP
Two North Market Street
Third Floor
San Jose, CA 95113

EXAMINER
HOYE, MICHAEL W

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 02/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

Office Action Summary	Application No.	Applicant(s)
	09/534,832	SHINTANI ET AL.
	Examiner	Art Unit
	Michael W. Hoye	2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-28</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-28</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>24 March 2000</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)   4)☐ Interview Summary (PTO-413) Paper No(s). _____ .

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5)☐ Notice of Informal Patent Application (PTO-152)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2 and 3</u>.   6)☐ Other: .

DETAILED ACTION

Drawings

1.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "212" has been used to designate both Frame Buffer 212 and User Input 212 in Fig. 2A. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: display device <u>218</u>. A proposed drawing correction, corrected drawings, or <u>amendment to the specification to add the reference sign(s) in the description</u>, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3.   The drawings are objected to under 37 CFR 1.83(a) because they fail to show display characteristic input lead 216 coupled to receiver 204 in Fig. 2A as described on page 11, lines 7-8, in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4.   The disclosure is objected to because of the following informalities: "display device 200"

on page 12, line 1, should be --video device 200--; and as objected to in the drawings, frame

buffer 212 and user input 212 have been designated with the same reference character throughout

the specification, an <u>amendment to the specification to renumber one of the two elements</u>

<u>through out the description</u>, is required in reply to the Office action to avoid abandonment of the

application.

    Appropriate correction is required.

Claim Objections

5.   Claim 16 is objected to because it is not included in the application. Based on the claim

construction the examiner assumes that claim 16 was intended to be similar to claim 3, where

claim 3 describes a method and claim 16 would pertain to the video device. Appropriate

correction is required.

6.   Claim 26 is objected to because of the following informalities: there appears to be a

typographical error in, "the video device recited in claim <u>11</u>," the examiner assumes that the

applicant intended "claim <u>11</u>" to be --claim <u>14</u>--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8.   Claims 1-6, 8-19 and 21-28 are rejected under 35 U.S.C. 102(e) as being anticipated by

Terasawa et al (USPN 6,147,714), cited by the examiner.

The applied reference has a common assignee with the instant application. Based upon

the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C.

102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37

CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

inventor of this application and is thus not the invention "by another," or by an appropriate

showing under 37 CFR 1.131.

As to claim 1, note the Terasawa et al reference, which discloses in a video device, a

method of determining a portion of a block of data to be provided to a display device. The

claimed step a) of receiving said block of data is met by tuner 21 of a front end (receiving

means) 20, which receives the data (see col. 11, lines 48-52 and col. 12, line 64 – col. 13, line 9).

The claimed step b) of receiving an input regarding an appearance of said display device is met

by manipulating the remote commander 5, or another means of input, and setting an aspect ratio

based on the display device 4 (col. 22, lines 10-33). The claimed step c) of selecting said portion

of said block of data to be displayed on said display device is met by the CPU 29 reading the

program data on the broadcast channels and selecting a predetermined amount to be displayed

(col. 15, lines 15-43 and col. 22, lines 10-33). The claimed step d) of formatting said portion of

said block of data to create an image frame for said display device is met by the receiver 2

producing frames of an electronic program guide (EPG) from the EPG data transmitted (col. 4,

line 63 – col. 5, line 5). The claimed step e) of communicating said image frame to said display

device is met by displaying the image frames of the EPG data on the monitor (col. 5, lines 1-5).

As to claim 2, the claimed method wherein said video device is a set-top box is met by

the IRD 2, which is applicable for use as a set top box (see col. 22, lines 34-39).

As to claim 3, the claimed method further comprising the step of storing said block of

data in a memory buffer for subsequent use is met by data buffer memory 35 and 35A (col. 14,

lines 39-52 and col. 12, line 64 – col. 13, line 9).

As to claim 4, the claimed method wherein said input includes display characteristics of

said display device is met by the remote commander 5, or other input methods described, which

may be used to set the aspect ratio of the EPG still pictures based on the aspect ratio of the

monitor (4) or display device (col. 22, lines 10-33).

As to claim 5, the claimed method wherein said display characteristics of said display

device include aspect ratio data regarding said display device is met by setting the aspect ratio of

the EPG still pictures based on the aspect ratio of the monitor (4) or display device (col. 22, lines

10-23), where this display device data is input into the IRD 2 (col. 22, lines 28-33).

As to claim 6, the claimed method wherein said display characteristics includes a screen

size and a resolution of said display device is met by setting the number of EPG pictures that

may be displayed in a single screen based on the aspect ratio or size of the screen and resolution

of the monitor (4) or display device (col. 22, lines 10-23), where this display device data is input

into the IRD 2 (col. 22, lines 28-33).

As to claim 8, the claimed method wherein said block of data is on-screen display

information is met by the EPG data (the block of data), such as the still pictures and the program

table which is the on-screen display information (col. 15, lines 31-43, col. 21, lines 39-48, col. 22, lines 10-23).

As to claim 9, the claimed method wherein said on-screen display information is Electronic Program Guide (EPG) information is met by the EPG data, such as the still pictures and the program table as described above (col. 15, lines 31-43, col. 21, lines 39-48, col. 22, lines 10-23).

As to claim 10, the claimed method wherein said portion of said block of data to be displayed and said formatting of said portion of said block of data is adapted for a display device having an aspect ratio of 4:3 is met by the display device (monitor 4) may have an aspect ratio of 4:3 and the data may be formatted for an aspect ratio of 4:3 (col. 22, lines 10-12).

As to claim 11, the claimed method wherein said portion of said block of data to be displayed and said formatting of said portion of said block of data is adapted for a display device having an aspect ratio of 16:9 is met by the display device (monitor 4) may have an aspect ratio of 16:9 and the data may be formatted for an aspect ratio of 16:9 (col. 22, lines 12-15).

As to claim 12, the claimed method wherein input is provided by a user is met by the various instructions are input by a user manipulating the remote commander 5, actuating the button switches on the front surface of the IRD 2, or using various pointing devices (col. 22, lines 28-33).

As to claim 13, the claimed step f) of selecting a specific portion of said block of data based on a default value for aspect ratio, resolution, and screen size of a class of display devices is met by the predetermined values used in the embodiments shown in Figs. 3 and 4 (also see Figs. 40-44), where the CPU 29 (Fig. 23) reads for a predetermined duration (the current time in

the example illustrated in FIG. 4, and for approximately 4 hours from the current time in the

example illustrated in FIG. 8) the program data on the broadcast channels (for example, 5

broadcast channels in the example shown in FIG. 4, and 15 channels in the example shown in

FIG. 8) in a predetermined display zone 250 of an entire EPG table 240 from the EPG area 35A

and writes it into the OSD area 25aA of the DRAM 25a as bit map data (col. 15, lines 31-43, also

see col. 21, lines 15-48, and col. 22, lines 10-33). The claimed step g) of communicating an

image frame formed by said specific portion of said block of data to said display device is met by

the MPEG video decoder 25 reads the bit map data from the OSD area 25aA and outputs it to the

monitor 4, whereby the EPG data, such as the reduced-size still pictures (FIG. 4) and the entire

program table (FIG. 8), can be displayed (see Fig. 23 and col. 15, lines 31-43, and col. 4, line 63

– col. 5, line 5). The claimed step h) of receiving user input regarding an appearance of said

image frame on said display device is met by the user manipulating the remote commander 5

after image frames are received to send input to the IRD 2 related to the appearance of the image

frames, where the user may select an image frame or change the display default settings by using

an input device or control (col. 16, lines 14-63 and col. 22, lines 10-33). The claimed step i) of

repeating steps f) through h) for each of different specific portions of said block of data that are

selected based on different available values of aspect ratio, resolution, and screen size of said

class of display devices is met by the inherency of the system as related to the steps described

above in which the user could repeat steps f) through h) for a variety of display devices (col. 16,

lines 14-63 and col. 22, lines 10-33). The claimed step j) of identifying a new default value to be

used with said display device based upon said input regarding said appearance is met by a user

manipulating the remote commander 5 or other input means to input a new default value to be

used with monitor 4 (col. 22, lines 10-33, specifically lines 15-23).

As to claim 14, Note the Terasawa et al reference, which discloses a video device. The

claimed receiver unit adapted to receive said block of data is met by front end 20 in Fig. 23 (see

col. 11, lines 48-52 and col. 12, line 64 – col. 13, line 9). The claimed processor coupled to said

receiver unit is met by CPU 29 in Fig. 23. The claimed computer readable memory coupled to

said processor and containing program instructions stored therein that when executed implement

a method for determining a portion of a block of data to be provided to a display device is met by

ROM 37 in Fig. 23, that is coupled to CPU 29, which contains a program that includes a method

for determining a portion of a block of data to be provide to a display device (col. 12, line 45 –

col. 13. line 9). The claimed step a) of receiving said block of data is met by tuner 21 of a front

end (receiving means) 20, which receives the data (see col. 11, lines 48-52 and col. 12, line 64 –

col. 13, line 9). The claimed step b) of receiving an input regarding an appearance of said

display device is met by manipulating the remote commander 5, or another means of input, and

setting an aspect ratio based on the display device 4 (col. 22, lines 10-33). The claimed step c) of

selecting said portion of said block of data to be displayed on said display device is met by the

CPU 29 reading the program data on the broadcast channels and selecting a predetermined

amount to be displayed (col. 15, lines 15-43 and col. 22, lines 10-33). The claimed step d) of

formatting said portion of said block of data to create an image frame for said display device is

met by the receiver 2 producing frames of an electronic program guide (EPG) from the EPG data

transmitted (col. 4, line 63 – col. 5, line 5). The claimed step e) of communicating said image

frame to said display device is met by displaying the image frames of the EPG data on the

monitor (col. 5, lines 1-5).

As to claim 15, the claimed video device wherein said video device is a set-top box is met

by the IRD 2, which is applicable for use as a set top box (see col. 22, lines 34-39).

As to claim 16, the claimed video device further comprising storing said block of data in

a memory buffer for subsequent use is met by data buffer memory 35 and 35A (col. 14, lines 39-

52 and col. 12, line 64 – col. 13, line 9).

As to claim 17, the claimed video device wherein said input includes display

characteristics of said display device is met by the remote commander 5, or other input methods

described, which may be used to set the aspect ratio of the EPG still pictures based on the aspect

ratio of the monitor (4) or display device (col. 22, lines 10-33).

As to claim 18, the claimed video device wherein said display characteristics of said

display device include aspect ratio data regarding said display device is met by setting the aspect

ratio of the EPG still pictures based on the aspect ratio of the monitor (4) or display device (col.

22, lines 10-23), where this display device data is input into the IRD 2 (col. 22, lines 28-33).

As to claim 19, the claimed video device wherein said display characteristics includes a

screen size and a resolution of said display device is met by setting the number of EPG pictures

that may be displayed in a single screen based on the aspect ratio or size of the screen and

resolution of the monitor (4) or display device (col. 22, lines 10-23), where this display device

data is input into the IRD 2 (col. 22, lines 28-33).

As to claim 21, the claimed video device wherein said block of data is on-screen display

information is met by the EPG data (the block of data), such as the still pictures and the program

table which is the on-screen display information (col. 15, lines 31-43, col. 21, lines 39-48, col. 22, lines 10-23).

As to claim 22, the claimed video device wherein said on-screen display information is Electronic Program Guide (EPG) information is met by the EPG data, such as the still pictures and the program table as described above (col. 15, lines 31-43, col. 21, lines 39-48, col. 22, lines 10-23).

As to claim 23, the claimed video device wherein said portion of said block of data to be displayed and said formatting of said portion of said block of data is adapted for a display device having an aspect ratio of 4:3 is met by the display device (monitor 4) may have an aspect ratio of 4:3 and the data may be formatted for an aspect ratio of 4:3 (col. 22, lines 10-12).

As to claim 24, the claimed video device wherein said portion of said block of data to be displayed and said formatting of said portion of said block of data is adapted for a display device having an aspect ratio of 16:9 is met by the display device (monitor 4) may have an aspect ratio of 16:9 and the data may be formatted for an aspect ratio of 16:9 (col. 22, lines 12-15).

As to claim 25, the claimed video device wherein input is provided by a user is met by the various instructions are input by a user manipulating the remote commander 5, actuating the button switches on the front surface of the IRD 2, or using various pointing devices (col. 22, lines 28-33).

As to claim 26, the claimed step f) of selecting a specific portion of said block of data based on a minimum possible value for aspect ratio, resolution, and screen size of a class of display devices is met by the predetermined values used in the embodiments shown in Figs. 3 and 4 (also see Figs. 40-44), where the CPU 29 (Fig. 23) reads for a predetermined duration (the

current time in the example illustrated in FIG. 4, and for approximately 4 hours from the current

time in the example illustrated in FIG. 8) the program data on the broadcast channels (for

example, 5 broadcast channels in the example shown in FIG. 4, and 15 channels in the example

shown in FIG. 8) in a predetermined display zone 250 of an entire EPG table 240 from the EPG

area 35A and writes it into the OSD area 25aA of the DRAM 25a as bit map data (col. 15, lines

31-43, also see col. 21, lines 15-48, and col. 22, lines 10-33). These predetermined values may

inherently be set to their minimum value through the user inputting the lowest value into the

system as described above. The claimed step g) of communicating an image frame formed by

said specific portion of said block of data to said display device is met by the MPEG video

decoder 25 reads the bit map data from the OSD area 25aA and outputs it to the monitor 4,

whereby the EPG data, such as the reduced-size still pictures (FIG. 4) and the entire program

table (FIG. 8), can be displayed (see Fig. 23 and col. 15, lines 31-43, and col. 4, line 63 – col. 5,

line 5). The claimed step h) of receiving user input regarding an appearance of said image frame

on said display device is met by the user manipulating the remote commander 5 after image

frames are received to send input to the IRD 2 related to the appearance of the image frames,

where the user may select an image frame or change the display default settings by using an

input device or control (col. 16, lines 14-63 and col. 22, lines 10-33). The claimed step i) of

repeating steps f) through h) for each of different specific portions of said block of data that are

selected based on different available values of aspect ratio, resolution, and screen size of said

class of display devices is met by the inherency of the system as related to the steps described

above in which the user could repeat steps f) through h) for a variety of display devices (col. 16,

lines 14-63 and col. 22, lines 10-33). The claimed step j) of identifying a new default value to be

used with said display device based upon said input regarding said appearance is met by a user

manipulating the remote commander 5 or other input means to input a new default value to be

used with monitor 4 (col. 22, lines 10-33, specifically lines 15-23).

As to claim 27, note the Terasawa et al reference, which discloses a video display system.

The claimed a) receiver for receiving a block of data corresponding to electronic programming

guide (EPG) information is met by tuner 21 of a front end (receiving means) 20, which receives

the data (see col. 11, lines 48-52 and col. 12, line 64 – col. 13, line 9), corresponding to the EPG

information (col. 4, line 63 – col. 5, line 5, and col. 12, line 64 – col. 13, line 9). The claimed b)

memory unit for storing information regarding display characteristics of a display screen is met

by EPROM 38 and ROM 37 (col. 13, lines 10-40 and col. 15, lines 54-65). The claimed

processor for formatting a portion of said EPG information into an array of columns and rows

based on said display characteristic of said display screen whereby more columns are displayed

if said display characteristics indicated a wide aspect ratio display is met by CPU 29 (col. 15,

lines 31-43, col. 21, lines 15-48, col. 22, lines 10-33, and Figs. 4, 8, and 39-44). The claimed d)

means for providing an output signal to said display screen to display said array is met by the

MPEG video decoder 25 and the NTSC encoder 27 in Fig. 23 (see col. 15, lines 31-43 and

col.12, lines 8-45).

As to claim 28, the claimed step f) of programming a receiver to automatically implement

vertical compression of said block of data with a first aspect ratio for display on said display

device having a second aspect ratio is met by compressing the data to a smaller aspect ratio for

display on monitor 4 of a different aspect ratio (col. 22, lines 15-23).

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10.   Claims 7 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Terasawa et al, in view of Sawada et al (USPN 6,476,821), cited by the examiner.

As to claim 7, the Terasawa et al reference is silent as to the claimed method wherein said

input is provided by said display device. The Sawada et al reference discloses an input that is

provided by said display device (display device 114 and 110, USB 107 of Fig. 1 and col. 7, lines

10-33). Therefore it would have been obvious to one of ordinary skill in the art at the time of the

invention to have combined the method of determining a potion of a block of data to be provided

to a display device as taught by Terasawa et al with the teaching of Sawada et al where the

display apparatus sends information to the video device or information processing apparatus.

One of ordinary skill in the art would have been led to make such a modification since it would

be easier for the user to simply connect the video device to the display device whereby the

display devices sends information back to the video device as to its settings or display

characteristics.

As to claim 20, the claimed video device wherein said input is provided by said display

device is rejected based on the same argument as stated above in claim 7.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lownes et al (USPN 6,137,539) – Discloses a digital television receiver image format converter, including a status display with information concerning the format of the received signal and any format conversion that is currently being performed.

Margulis, Neal (USPN 6,456,340) – Discloses a method and apparatus for performing image transforms in a digital display system.

Oku et al (USPN 6,310,654) – Discloses a picture format converting means for a variety of on screen display formats.

Ouchiyama et al (USPN 6,362,853) – Discloses a method and apparatus for displaying images of various aspect ratios.

Yamamoto et al. (USPN 6,166,778) – Discloses a broadcast receiving apparatus with an auto wide function for different aspect ratio settings to be used for the display.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoye whose telephone number is (703) 305-6954. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at (703) 305-4795.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
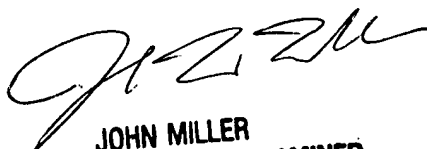
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,

Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Technology Center 2600 Customer Service Office whose telephone

number is (703) 306-0377.

Michael W. Hoye
February 14, 2003

JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600